UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,013	02/26/2004	Masaki Oomori	D-1580	6734

7590 02/08/2008

HAUPTMAN KANESAKA BERNER PATENT AGENTS, LLP
Suite 310
1700 Diagonal Road
Alexandria, VA 22314

EXAMINER	
MORRISON, THOMAS A	

ART UNIT	PAPER NUMBER
3653	

MAIL DATE	DELIVERY MODE
02/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/786,013	OOMORI ET AL.	
	Examiner	Art Unit	
	THOMAS A. MORRISON	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 14-18 and 20-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *5 and 6* is/are allowed.

6)☒ Claim(s) *1-4,14-16,18,20 and 21* is/are rejected.

7)☒ Claim(s) *17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment of 1/14/2008 has been entered.

2. The indicated allowability of former claim 19 (now amended claim 1) is withdrawn in view of the newly discovered reference(s) to U.S. Patent No. 5,005,052 (Watanabe et al.). Rejections based on the newly cited reference(s) follow. The examiner regrets any inconvenience that may have resulted from this new Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 14, 15 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,005,052 (Watanabe et al.)(hereinafter "Watanabe et al.").

Regarding claim 1, Figs. 1-20 show a document feeder (Fig. 20) to be disposed above a platen (3) of an image reading apparatus, comprising:

a sheet feed stacker (including 100) disposed above the platen (3) for stacking an original,

a sheet discharge stacker (including 100b) disposed above the sheet feed stacker (including 100),

a transporting guide (83 or 104) having one side (bottom side of 83 in Fig. 20 or right side of 104 in Fig. 20) for communicating with the sheet feed stacker (including 100) and the sheet discharge stacker (including 100b), and the other side (top side of 83 in Fig. 20 or left side of 104 in Fig. 20),

transporting means (including 93) disposed above the platen (3) adjacent to the other side (top side of element 83 in Fig. 20 or left side of 104 in Fig. 20) of the transporting guide (83), the transporting means (including 93) transporting the original from the sheet feed stacker (including 100) to a predetermined position on the platen (3) through the transporting guide (83 or 104) and transporting the original on the platen (3) to the sheet discharge stacker (including 100b) through the transporting guide (83 or 104),

drive means (i.e., whatever structure drives elements 93) connected to the transporting means (including 93) for driving the same and capable of rotating in forward and reverse directions, and

a path switching gate (106) disposed at the transporting guide (83 or 104) for guiding the original from the sheet feed stacker (including 100) to the transporting guide (83 or 104) and guiding the original from the transporting guide (83 or 104) to the sheet discharge stacker (including 100b).

Regarding claim 14, Figs. 1-20 show an image reading apparatus comprising:

a platen (3) for placing an original thereon,

photoelectric converting means (including 18) disposed adjacent to the platen (3) for reading the original on the platen (3), and

the document feeder according to claim 1, disposed on the platen (3).

See rejection of claim 1 above for the elements of the document feeder.

Regarding claim 15, Figs. 1-20 show a device frame (81) for covering an entire portion of the platen (3),

a transporting case frame (Fig. 3) attached to the device frame (81) for covering a part of the platen (3) and supporting the transporting means (including 93), and

a light-shielding cover member (unnumbered vertical wall directly below reference numeral 46 in Fig. 2) attached to the device frame (81) at a portion other than a portion where the transporting means (including 93) is attached for blocking light from the platen (3),

the sheet feed stacker (including 100) being disposed above the light-shielding cover member.

Regarding claim 20, Figs. 1-20 show that the path switching gate (106) has a weight to allow one side of the path switching gate (106) to incline toward the transporting guide (including 83).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,060,923 (Takimoto et al.)(hereinafter "Takimoto et al.") and U.S. Patent No. 4,412,738 (Ahern et al.)(hereinafter "Ahern et al."). Watanabe et al. discloses most of the limitations of claim 2. Watanabe et al. discloses transporting means (including 93) for transporting sheets, but does not disclose that such transporting means has vacuum means, pulleys, an endless belt, and a tension roller, as claimed.

Takimoto et al. discloses that it is well known to provide a document feeder with transporting means (including 186, 194, 204 and 210) having a pair of pulleys (186 and 194), an endless belt (204) placed between the pulleys (186 and 194), and a tension roller (210) that restricts a distance between the endless belt (204) and a platen (8), for transferring sheets.

Because both Watanabe et al. and Takimoto et al. teach transporting means ((including 93) and (including 182, 194, 204 and 210), respectively) for transferring sheet material, it would have been obvious to one skilled in the art to substitute the belt arrangement (i.e., transporting means) of Takimoto et al. for

the roller arrangement (i.e., transporting means) of Watanabe et al. to achieve the predictable result of transferring sheet material. Providing the belt arrangement of Takimoto et al. on the apparatus of Watanabe et al. will result in the transporting guide (104) of Watanabe et al. being arranged for guiding the original to a part of the endless belt located between one of the pulleys and the tension roller. Watanabe et al. in view of Takimoto et al. discloses all of the limitations of claim 2, except for vacuum means, as claimed.

Ahern et al. discloses that it is well known to provide a document feeder to be disposed above a platen (12) with vacuum means (See Abstract in Ahern et al.) for the purpose of effectively tacking a document page to a belt (32) for movement to the platen (12) of Ahern et al. See e.g., Abstract in Ahern et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Watanabe et al., as modified by Takimoto et al., with vacuum means for the purpose of effectively tacking a document page to the belt for movement to the platen, as taught by the Abstract of Ahern et al. Thus, all of the limitations of claim 2 are met.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. in view of Takimoto et al., and further in view of Ahern et al. For clarification, all of the limitations of claims 1, 2 and 3 are included in the following rejection of claim 3.

Regarding claim 3, Figs. 1-20 of Watanabe et al. show a document feeder (Fig. 20) to be disposed above a platen (3) of an image reading apparatus, comprising:

a sheet feed stacker (including 100) disposed above the platen (3) for stacking an original,

a sheet discharge stacker (including 100b) disposed above the sheet feed stacker (including 100),

a transporting guide (including 83) having one side (bottom side of 83 in Fig. 20) for communicating with the sheet feed stacker (including 100) and the sheet discharge stacker (including 100b), and the other side (top side of 83 in Fig. 20),

transporting means (including 93) disposed above the platen (3) adjacent to the other side (top side of 83 in Fig. 20) of the transporting guide (including 83), the transporting means (including 93) transporting the original from the sheet feed stacker (including 100) to a predetermined position on the platen (3) through the transporting guide (including 83) and transporting the original on the platen (3) to the sheet discharge stacker (including 100b) through the transporting guide (including 83),

drive means (i.e., whatever structure drives elements 93) connected to the transporting means (including 93) for driving the same and capable of rotating in forward and reverse directions, and

a path switching gate (106) disposed at the transporting guide (including 83) for guiding the original from the sheet feed stacker (including 100) to the transporting guide (including 83) and guiding the original from the transporting guide (including 83) to the sheet discharge stacker (including 100b).

However, Watanabe et al. does not disclose that the transporting means includes vacuum means, a pair of pulleys, an endless belt, or a tension roller, as set forth in claim 2. Also, Watanabe et al. does not disclose that the transporting guide has an elastic film member, as set forth in claim 3. Elements 83 and 93 of Watanabe et al. guide and transport sheets, respectively, through the sheet handling apparatus of Watanabe et al.

Takimoto et al. discloses that it is well known to guide and transport sheets through a sheet handling apparatus via a moving transporting guide (130) and transporting means (including 182, 186, 393, 382, 394, and 374). Figs. 1-16 of Takimoto et al. disclose that such transporting means (including 182, 186, 393, 382, 394, and 374) has a pair of pulleys (393 and 382), an endless belt (394) placed between the pulleys (393 and 382), and a tension roller (374) for restricting a distance between the endless belt (394) and a platen (8). Also, the moving transporting guide (130) is arranged for guiding the original to a part of the endless belt (394) located between one of the pulleys (e.g., 393) and the tension roller (374). With regard to claim 3, as best understood, the moving transporting guide (130) has, at the other side, a forward end portion composed of an elastic film member contacting the platen (8) of Takimoto et al.

Because both Watanabe et al. and Takimoto et al. teach transporting guides and transporting means for guiding and transporting sheet material, it would have been obvious to one skilled in the art to substitute the moving transporting guide and transporting means of Takimoto et al. for transporting guide and transporting means of Watanabe et al. to achieve the predictable

result of guiding and transporting sheet material. Watanabe et al. in view of Takimoto et al. discloses all of the limitations of claim 3, except for vacuum means, as claimed.

Ahern et al. discloses that it is well known to provide a document feeder to be disposed above a platen (12) with vacuum means (See Abstract in Ahern et al.) for the purpose of effectively tacking a document page to a moving guide (32) for movement to the platen (12) of Ahern et al. See e.g., Abstract of Ahern et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Watanabe et al., as modified by Takimoto et al., with vacuum means for the purpose of effectively tacking a document page to the guide (i.e., the moving transporting guide) for movement to the platen (3) of Watanabe et al., as taught by the Abstract of Ahern et al. Providing vacuum means on the apparatus of Watanabe et al., as modified by Takamoto et al., in a manner as taught by Ahern et al., will result in the elastic film member of the moving transporting guide being located adjacent to a chamber of the vacuum means. Thus, all of the limitations of claim 3 are met by this combination of references.

6. Claims 4, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. as applied to claims 1 and 14 above, and further in view of Japanese Publication No. 5-77507 (hereinafter "JP'507"). Watanabe et al. discloses most of the limitations of claims 4 and 16 including feeder means (101 or 107 in Fig. 20) disposed adjacent to the sheet feed stacker (100) for feeding the original from the sheet feed stacker (100) to the transporting

means (including 93), but Watanabe et al. does not disclose interconnecting means or the pivotal arrangement of the sheet feed stacker and the sheet discharge stacker, as claimed.

Figs. 1-5 of JP'507 disclose that it is well known to provide a document feeder (Fig. 1) with interconnecting means (25) disposed between a sheet feed stacker (8) and a sheet discharge stacker (24), the sheet feed stacker (8) and the sheet discharge stacker (24) being pivotally arranged to enlarge a rear space between the sheet feed stacker (8) and the sheet discharge stacker (24), so that when the sheet discharge stacker (24) is rotated, the interconnecting means (25) is actuated to push a forward end of the sheet feed stacker (8) in a direction away from a feeder means (12) of JP'507. The English Abstract of JP'507 explains that such an arrangement promotes miniaturization. See English Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide interconnecting means between the sheet feed stacker (100) and the sheet discharge stacker (100b) of Watanabe et al. and to pivotally connect the sheet feed stacker (100) and the sheet discharge stacker (100b) of Watanabe et al. to the Watanabe et al. apparatus, for the purpose of promoting miniaturization of such apparatus, as taught by JP'507. Pivotally connecting the sheet feed stacker (100) and the sheet discharge stacker (100b) of Watanabe et al. onto the Watanabe et al. apparatus will result in the rear space between the sheet feed stacker (100) and the sheet discharge stacker (100b) of Watanabe et al. being adjacent to the transporting guide (104)

of Watanabe et al., as claimed. Thus, all of the limitations of claims 4 and 16 are met by this combination of references.

Regarding claim 21, Fig. 20 of Watanabe et al. shows that the feeder means (101) is disposed above the sheet feed stacker (100).

7. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. and JP'507 as applied to claim 16 above, and further in view of further in view of Takimoto et al. and Ahern et al. Watanabe et al. in view of JP'507 discloses most of the limitations of claim 18. Watanabe et al. discloses transporting means (including 93) for transporting sheets, but does not disclose that such transporting means has an endless belt or vacuum means, as claimed.

Takimoto et al. discloses that it is well known to provide a document feeder with transporting means (including 186, 194 and 204) having endless belt (204) placed along a platen (8) for transferring sheets.

Because both Watanabe et al. and Takimoto et al. teach transporting means ((including 93) and (including 182, 194 and 204), respectively) for transporting sheet material, it would have been obvious to one skilled in the art to substitute the belt arrangement (i.e., transporting means) of Takimoto et al. for the roller arrangement (i.e., transporting means) of Watanabe et al. to achieve the predictable result of transporting sheet material. Watanabe et al. in view of JP'507 and Takimoto et al. discloses all of the limitations of claim 18, except for vacuum means, as claimed.

Ahern et al. discloses that it is well known to provide a document feeder to be disposed above a platen (12) with vacuum means (See Abstract in Ahern et

al.) for the purpose of effectively tacking a document page to a belt (32) for movement to the platen (12) of Ahern et al. See e.g., Abstract in Ahern et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the apparatus of Watanabe et al., as modified by JP'507 and Takimoto et al., with vacuum means for the purpose of effectively tacking a document page to the belt for movement to the platen, as taught by the Abstract of Ahern et al. Thus, all of the limitations of claim 18 are met by this combination of references.

Response to Arguments

8. Applicant's arguments with respect to claims 1, 15, 20 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

9. Claims 5-6 are allowed. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS A. MORRISON whose telephone number is (571)272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick H. Mackey/
Supervisory Patent Examiner, Art Unit 3653

1/27/2008